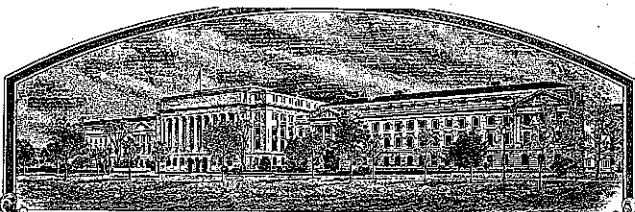


No.

200200135



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Syngenta Seeds, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE SEED. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Coker 9184'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this tenth day of June, in the year two thousand two.

Attest:



*P. L. M. Zukel*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service


*Arthur S. Gorman*

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<b>1. NAME OF OWNER</b>  Syngenta Seeds, Inc.		<b>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME</b> BL940812		<b>3. VARIETY NAME</b> COKER 9184	
<b>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)</b>  P.O. Box 959 Minneapolis, MN 55440 ATTN: John Thorne		<b>5. TELEPHONE (Include area code)</b> 763-593-7333		<b>FOR OFFICIAL USE ONLY</b>  <b>PVPO NUMBER</b> <div style="font-size: 2em; font-weight: bold;">200200135</div>	
<b>6. FAX (Include area code)</b> 763-542-0194		<b>7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)</b> Corporation			
<b>8. IF INCORPORATED, GIVE STATE OF INCORPORATION</b> Delaware		<b>9. DATE OF INCORPORATION</b> 1976		<b>FILING DATE</b> April 8, 2002	
<b>10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)</b>  John Thorne Syngenta Seeds, Inc. P.O. Box 949 Washington, IA 52353-0949					
<b>11. TELEPHONE (Include area code)</b> 319-653-2181		<b>12. FAX (Include area code)</b> 319-653-4609		<b>13. E-MAIL</b> johnc.thorne@syngenta.com	
<b>14. CROP KIND (Common Name)</b> Common Wheat		<b>FILING AND EXAMINATION FEES:</b> \$ 2705.00 <b>DATE</b> 4/8/2002 <b>CERTIFICATION FEE:</b> \$ 320.00 <b>DATE</b> 5/8/02			
<b>15. GENUS AND SPECIES NAME OF CROP</b> Triticum aestivum					
<b>17. IS THE VARIETY A FIRST GENERATION HYBRID?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
<b>18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)</b>					
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)					
<b>19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(e) of the Plant Variety Protection Act</b> <input checked="" type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input type="checkbox"/> NO (If "no", go to item 22)					
<b>20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED					
<b>21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED NUMBER 1,2,3, etc. <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 1 <input type="checkbox"/> 1 (If additional explanation is necessary, please use the space indicated on the reverse.)					
<b>22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?</b> <input checked="" type="checkbox"/> YES Fall 2001, U.S.A <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)					
<b>23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)					
<b>24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.</b>  The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
<b>SIGNATURE OF OWNER</b>  <b>NAME (Please print or type)</b> John C. Thorne			<b>SIGNATURE OF OWNER</b>  <b>NAME (Please print or type)</b>		
<b>CAPACITY OR TITLE</b> Devel. Dir., Self-pollinated Crops		<b>DATE</b> 21 March 2002		<b>CAPACITY OR TITLE</b> 	
<b>DATE</b>		<b>DATE</b>			

**COKER 9184****Exhibit A: Origin and Breeding History of the Variety**

COKER 9184 is a soft red winter wheat developed by Syngenta Seeds, Inc. at Bay, Arkansas. It was derived from a cross made in 1989, with a pedigree of COKER 9803/COKER 9835. Both parents are current varieties of Syngenta Seeds, Inc. The pedigree of COKER 9803 is McNair 1003/COKER 916. COKER 9835 has a pedigree of Ck 85-20/Pioneer variety '2550". The pedigree of Ck85-20 is COKER 68-19//COKER 61-19\*3/IN4946A4-18-2-10-1/4/Blueboy/3/COKER 65-20\*5/Wichita 7-Transfer//Tifton. A bulk breeding system was used to develop COKER 9184. An F4 derived head row was bulked as an F5; advancement was based on disease resistance and agronomic characteristics. Preliminary yield testing was initiated as an F6 in 1994-95 and the line was designated BL940812. Further yield testing and seed increase continued until release in 2001 as COKER 9184. The advancement was based on yield, disease and insect resistance and agronomic traits. See Table 1 for development procedure.

Table 1: Development of COKER 9184

Season	Generation	Activity
1989		Cross
1989-1990	F1	Seed increased in greenhouse as bulk.
1990-1991	F2	Bulk population grown in field, advancement based on leaf rust resistance and agronomic traits.
1991-1992	F3	Bulk population, selected 100 heads, harvest based on leaf rust resistance, height and maturity.
1992-1993	F4	Head row nursery, selection based on leaf rust resistance and agronomic traits.
1993-1994	F5	Observation nursery #5993, selection and advancement based on height, maturity and leaf rust resistance.
1994-1995	F6	Preliminary yield testing, assigned line number BL940812. Advancement based on yield, height and disease resistance.
1995-1996	F7	Yield testing in advanced company trials, small increase block at Bay, Arkansas, advancement based on yield, test weight and disease resistance.
1996-1997	F8	Yield testing in elite company trials, small increase with nested head rows for purity; advancement based on yield, leaf rust resistance, height and test weight.
1997-1998	F9	Yield testing in elite company trials, small increase with nested plots for purity; advancement based on yield, agronomic traits and disease resistance.
1998-1999	F10	Yield testing in elite company trials, large pre-breeder increase and tested in Uniform Southern Soft Red Winter Wheat Nursery. Advancement based on yield, test weight, agronomic traits, disease and insect resistance.
1999-2000	F11	Continued testing in elite company trials and limited state testing with breeder/foundation seed increase. Advancement based on yield, agronomic traits, disease and Hessian fly resistance.
2000-2001	F12	Variety released as COKER 9184 and registered seed sold to TGN Certified Seed Growers, fall 2001.

**COKER 9184****Exhibit A: Origin and Breeding History of the Variety (cont.)**

COKER 9184 is an F4 derived head row with yield testing initiated as an F6 in the 1994-1995 growing season. The variety has been tested and observed for 6 years with 5 years of seed increase. COKER 9184 is stable and uniform. Breeder seed was developed by bulking seed from head row generated increase strips that had been maintained separately for three (F8, F9 and F10) generations of increase for purity, uniformity, and stability comparisons. Variants may include one or more of the following in any combination; taller, awned, bronze, or later maturity type, which may be expressed up to 1%.

**COKER 9184****Exhibit B: Statement of Distinctness**

COKER 9184 most closely resembles COKER 9803, however COKER 9184 has a red coleoptile color where COKER 9803 has a white colored coleoptile. COKER 9184 is 6 days later than COKER 9803. COKER 9184 has a wanting glume shoulder and the beak apex shape is acuminate where COKER 9803 has an oblique glume shoulder and an acute apex shape. See Table 2.

Table 2: Distinguishing Characteristics

	1999* Heading Date	2000* Heading Date	Coleoptile Color	Glume Shoulder Shape	Glume Beak Shape of Apex
COKER 9184	4/21	4/19	Red	Wanting	Acuminate
COKER 9803	4/16	4/13	White	Oblique	Acute
# Entries	50	50			
# Reps	3	3			
Test Mean	4/19	4/16			
LSD (0.05)	2	2			
CV %	1	1			

\*Heading date taken at Bay, Arkansas both seasons, date is from April 1. Trials were Randomized Complete Block design with an ANOVA run for statistical analysis.

**REPRODUCE LOCALLY. Include form number and date on all reproductions.**

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Form Approved - OMB No. 0581-0055

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**U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705**

**EXHIBIT C  
(Wheat)**

**OBJECTIVE DESCRIPTION OF VARIETY  
WHEAT (*Triticum* spp.)**

NAME OF APPLICANT(S) Syngenta Seeds, Inc.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or RD No., City, State, and Zip Code)  P.O. Box 959 Minneapolis, MN 55440 Attn: John Thorne	PVPO NUMBER <b>200200135</b>
	VARIETY NAME COKER 9184
	TEMPORARY OR EXPERIMENTAL DESIGNATION BL940812

**PLEASE READ ALL INSTRUCTIONS CAREFULLY:** Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g.    or   ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: Munsell Color Chart  
Please answer all questions for your variety; lack of response may delay progress of your application.

**1. KIND:**

1=Common

2=Durum

3=Club

4=Other (SPECIFY): \_\_\_\_\_

**2. VERNALIZATION:**

1=Spring

2=Winter

3=Other (SPECIFY): \_\_\_\_\_

**3. COLEOPTILE ANTHOCYANIN:**

1=Absent

2=Present

**4. JUVENILE PLANT GROWTH:**

1=Prostrate

2=Semi-erect

3=Erect

**5. PLANT COLOR (boot stage):**

Munsell Color Chart 7.5GY5/6

1 = Yellow-Green

2 = Green

3 = Blue-Green

**6. FLAG LEAF (boot stage):**

1 = Erect

2 = Recurved

1 = Not Twisted

2 = Twisted

**7. EAR EMERGENCE:** 

Number of Days Earlier Than \_\_\_\_\_ \*

 Number of Days Later Than COKER 9803 \*

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## 8. ANTH. COLOR:

☐ 1

1 = Yellow

2 = Purple

## 9. PLANT HEIGHT (from soil to top of head, excluding awns):

☐ ☐

cm Taller Than

☐ 0 ☐ 8

cm Shorter Than COKER 9663

\* Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

## 10. STEM:

## A. ANTHOCYANIN

☐ 1

1 = Absent

2 = Present

## B. WAXY BLOOM

☐ 2

1 = Absent

2 = Present

## C. HAIRINESS (last internode of rachis)

☐ 2

1 = Absent

2 = Present

## D. INTERNODE (SPECIFY NUMBER)

3

☐ 1

1 = Hollow

2 = Semi-solid

3 = Solid

## E. PEDUNCLE

☐ 2

1 = Absent

2 = Present

☐ 13

cm Length

## 11. HEAD (at Maturity):

## A. DENSITY

☐ 3

1 = Lax

3 = Dense

2 = Middense

## C. CURVATURE

☐ 3

1 = Erect

2 = Inclined

3 = Recurved

## B. SHAPE

☐ 2

1 = Tapering

2 = Strap

3 = Clavate

4 = Other (SPECIFY):

## D. AWNEDNESS

☐ 2

1 = Awnless

2 = Apically Awnletted

3 = Awnletted

4 = Awned

## 12. GLUMES (at Maturity):

## A. COLOR

MCC 5Y 8/4

☐ 2

1 = White

2 = Tan

3 = Other (SPECIFY):

## C. BEAK

☐ 3

1 = Obtuse

2 = Acute

3 = Acuminate

## B. SHOULDER

☐ 1

1 = Wanting

2 = Oblique

3 = Rounded

4 = Square

5 = Elevated

6 = Apiculate

## D. LENGTH

☐ 3

1 = Short

2 = Medium

(ca. 7mm)

(ca. 8mm)

3 = Long (ca. 9mm)

## 12. GLUMES (at Maturity) Continued:

## E. WIDTH

- ☐ 1 = Narrow (ca. 3mm)    2 = Medium (ca. 3.5mm)  
3 = Wide (ca. 4mm)

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## 13. SEED:

## A. SHAPE

- ☐ 1 = Ovate    2 = Oval    3 = Elliptical

## B. CHEEK

- ☐ 2 = Rounded    2 = Angular

## E. Color

- ☐ 3 = White    2 = Amber    3 = Red  
4 = OTHER (Specify)  
Munsell Color Chart 7.5 YR 6/8

## F. TEXTURE

- ☐ 2 = Hard    2 = Soft

## C. BRUSH

- ☐ 2 = Short    2 = Medium    3 = Long  
☐ 2 = Not Collared    2 = Collared

## D. CREASE

- ☐ 2 = Width 60% or less of Kernel  
2 = Width 80% or less of Kernel  
3 = Width Nearly as Wide as Kernel

- ☐ 1 = Depth 20% or less of Kernel  
2 = Depth 35% or less of Kernel  
3 = Depth 50% or less of Kernel

## G. PHENOL REACTION (see instructions):

- ☐ 1 = Ivory    2 = Fawn  
3 = Light Brown    4 = Dark Brown  
5 = Black  
40% dark  
60% Light

## 14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

- |  |   |
|--|---|
| <input type="checkbox"/> 2 Stem Rust ( <i>Puccinia graminis</i> f. sp. <i>tritici</i> )<br>RIHJ, QKCS in 1999          | <input type="checkbox"/> 2 Leaf Rust ( <i>Puccinia recondita</i> f. sp. <i>tritici</i> )<br>Prevalent field races in Arkansas and Georgia 1999 & 2000. (Continued Below)      |
| <input type="checkbox"/> 3 Stripe Rust ( <i>Puccinia striiformis</i> )<br>Field races in Arkansas 2000.                | <input type="checkbox"/> 0 Loose Smut ( <i>Ustilago tritici</i> )   |
| <input type="checkbox"/> 0 Tan Spot ( <i>Pyrenophora tritici-repentis</i> )  | <input type="checkbox"/> 0 Flag Smut ( <i>Urocystis agropyri</i> )  |
| <input type="checkbox"/> 0 Halo Spot ( <i>Selenophoma donacis</i> )  | <input type="checkbox"/> 0 Common Bunt ( <i>Tilletia tritici</i> or <i>T. laevis</i> )  |
| <input type="checkbox"/> 0 <i>Septoria nodorum</i> (Glume Blotch)  | <input type="checkbox"/> 0 Dwarf Bunt ( <i>Tilletia controversa</i> )   |
| <input type="checkbox"/> 0 <i>Septoria avenae</i> (Speckled Leaf Disease)  | <input type="checkbox"/> 0 Karnal Bunt ( <i>Tilletia indica</i> )   |
| <input type="checkbox"/> 3 <i>Septoria tritici</i> (Speckled Leaf Blotch)<br>Field Strains in Arkansas in 1998 & 1999. | <input type="checkbox"/> 3 Powdery Mildew ( <i>Erysiphe graminis</i> f. sp. <i>tritici</i> )<br>Prevalent field races in Georgia, North Carolina and Virginia in 1999 & 2000. |
| <input type="checkbox"/> 0 Scab ( <i>Fusarium</i> spp.)  | <input type="checkbox"/> 0 "Snow Molds"   |



14. Disease (Continued) (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

## PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

- |   |   |
|---|---|
| <input type="checkbox"/> 0 "Black Point" (Kernel Smudge)  | <input type="checkbox"/> 0 Common Root Rot ( <i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.) |
| <input type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV)   | <input type="checkbox"/> 0 Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )                                 |
| <input type="checkbox"/> 0 Soilborne Mosaic Virus (SBMV)  | <input type="checkbox"/> 0 Black Chaff ( <i>Xanthomonas campestris</i> pv. <i>translucens</i> )               |
| <input type="checkbox"/> 3 Wheat Yellow (Spindle Streak) Mosaic Virus<br>Isolated from Syngenta Seeds Bay,<br>Arkansas farm | <input type="checkbox"/> 0 Bacterial Leaf Blight ( <i>Pseudomonas syringae</i> pv. <i>syringae</i> )          |
| <input type="checkbox"/> 0 Wheat Streak Mosaic Virus (WSMV)   | <input type="checkbox"/> Other (SPECIFY)  |
| <input type="checkbox"/> Other (SPECIFY)  | <input type="checkbox"/> Other (SPECIFY)  |
| <input type="checkbox"/> Other (SPECIFY)  | <input type="checkbox"/> Other (SPECIFY)  |
| <input type="checkbox"/> Other (SPECIFY)  | <input type="checkbox"/> Other (SPECIFY)  |

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

## PLEASE SPECIFY BIOTYPE (where needed)

- |   |  |
|---|--|
| <input type="checkbox"/> 2 Hessian Fly ( <i>Mayetiola destructor</i> )<br>Biotypes C, O & GP. | <input type="checkbox"/> Other (SPECIFY) |
| <input type="checkbox"/> 0 Stem Sawfly ( <i>Cephus</i> spp.)                                  | <input type="checkbox"/> Other (SPECIFY) |
| <input type="checkbox"/> 0 Cereal Leaf Beetle ( <i>Oulema melanopa</i> )                      | <input type="checkbox"/> Other (SPECIFY) |
| <input type="checkbox"/> 0 Russian Aphid ( <i>Diuraphis noxia</i> )                           | <input type="checkbox"/> Other (SPECIFY) |
| <input type="checkbox"/> 0 Greenbug ( <i>Schizaphis graminum</i> )                            | <input type="checkbox"/> Other (SPECIFY) |
| <input type="checkbox"/> 0 Aphids   | <input type="checkbox"/> Other (SPECIFY) |

## 16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS

Leaf Rust resistant to isolates MDGL, PBRQ, BLBB, MCRQ, and CDBB.

Table 3:  
COKER 9184

Exhibit D: Additional Description

Baking and Milling Quality  
Syngenta Seeds, Inc.  
2002

	Milling	Baking	Combined	Micro T. Weight	Soft Equival.	Flour Yield	Flour Protein	Micro AWRC	Cookie Dia.
1997 Commercial Elite Standard (Hickory)	100	100.0	100.0	61.1	59.8	71.3	7.45	55.6	18.13
COKER 9184	105.6	102.8	102.8	61.4	65.5	71.8	6.58	57.4	18.81
1998 Commercial Elite Standard (Pioneer 2552)	100.0	100.0	100.0	58.8	61.8	73.8	9.56	54	17.93
COKER 9184	80.2	74.1	74.1	61.6	58.2	68.8	10.55	56.1	17.12
1999 Commercial Elite Standard (COKER 9543)	100.0	100.0	100.0	61.4	58.2	72	8.39	53.6	18.27
COKER 9184	103.6	97.4	97.4	61.6	64.3	72	8.27	56.5	18.4

Commercial Elite is an in house Syngenta Seeds yield test. All quality evaluations have been conducted by the USDA Soft Wheat Quality Lab, Wooster, OH. COKER 9184 has been rated as satisfactory. Scores are adjusted to a standard known to exhibit excellent quality.

**Table 4:**  
**COKER 9184**

**Exhibit D: Additional Description**

**Yield and Agronomic Data:**

	Yield (bu/ac)			Test Weight 1 Year	Head Date (4/1) (Bay, AR)		Height in. 1 Year	Lodging (1-9) 3 Year	Growth Habit 3 Year
	1 Year	2 Year	3 Year		1999	2000			
<b>COKER 9184</b>	<b>70</b>	<b>69</b>	<b>67</b>	<b>59.4</b>	<b>21</b>	<b>19</b>	<b>36</b>	<b>2</b>	<b>3</b>
COKER 9663	77	75	73	58.5	14	13	39	3	3
COKER 9803	70	69	67	58.2	16	13	35	3	3
COKER 9704	70	70	67	58.3	16	13	35	3	3
COKER 9543	69	68	66	56.8	16	16	34	3	3
COKER 9835	69	68	64	55.5	17	11	33	2	4
Pioneer 2684	74	74	70	59.7	12	11	35	2	3
Jackson	71	68	67	58.1	23	18	36	3	3
Patterson	68	65	64	58.2	22	17	39	2	2
Test Mean	70	68	66	57.9	19	16	36	3	3
Trials With Data	16	31	45	6	1	1	14	32	4
LSD (0.05)	5.9	4.2	3.3	1.2	2	2	3	0.4	0.7
CV %	10.5	10.4	10.6	1	1	1	17	32.9	14.7

**Yield:**

1 Year = 2000 yield data from AR, MO, TN, KY, IL, PA, VA, NC, SC, GA, MS, TX Syngenta Seeds locations

2 Year = 2000 locations plus 1999 locations in same states

3 Year = 2000 + 1999 Locations plus 1998 locations in same states

Test Weight (lb/bu): Average test weight taken from Union City, TN; Dewitt, AR; Whitehall, AR; Plymouth, NC; Warsaw, VA; and Plains, GA; 2000

Head Date: Average date after April 1 at Bay, AR 1999 and 2000

Height: Averaged over 14 locations in 2000. Same Locations as above.

Lodging: Averaged over 3 years 1998, 1999, 2000 locations. 1 = none.

Growth Habit: Bay, AR 3 Year average 1 = Prostrate 5 = Erect

Table 5:  
COKER 9184

200200135

Exhibit D: Additional Description

Leaf Rust

	1999			2000			
	Bay, AR	Plains, GA	Plymouth, NC	Lewisville, AR	Plains, GA	Plymouth, NC	Warsaw, VA
<b>COKER 9184</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>
COKER 9663	1	2	2	2	7	1	2
COKER 9803	2	6	6	4	6	6	4
COKER 9704	3	9	5	4	4	5	4
COKER 9543	3	9	7	4	6	4	4
COKER 9835	2	7	9	3	9	4	4
Pioneer 2684	4	4	6	6	6	7	6
Jackson	5	9	8	7	7	8	7
Patterson	4	7	8	6	7	6	5
Test Mean	2	5	5	3	4	4	4
Reps With Data	3	1	2	3	2	2	3
LSD (0.05)	1.1		2	1.5	2.9	1.6	1.5
CV %	29.2		20.3	29.6	33.7	20.8	17.5

Scale (1 - 9) 1 = none

Table 6:  
COKER 9184

Exhibit D: Additional Description

Powdery Mildew

	1999			2000				
	Plains, GA	Kinston, NC	Warsaw, VA	Henderson, KY	Plains, GA	Hartsville, SC	Kinston, NC	Warsaw, VA
<b>COKER 9184</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>6</b>
COKER 9663	8	6	2	5	5	2	4	6
COKER 9803	8	5	3	3	1	2	3	4
COKER 9704	1	5	3	3	2	3	3	5
COKER 9543	8	5	2	5	1	2	3	5
COKER 9835	3	4	2	3	2	3	3	7
Pioneer 2684	1	4	2	2	1	1	1	5
Jackson	8	7	2	3	1	2	5	4
Patterson	3	5	3	5	2	4	4	7
Test Mean	6	5	3	4	3	3	3	6
Reps				3	1	3	2	3
LSD (0.05)		1.3	1.3	2.3		1	1.2	1.6
CV %		13.1	33.2	37.6		25.1	19.5	28.7

Scale (1 - 9) 1 = none

200200135

**Table 7:**  
**COKER 9184**

**Exhibit D: Additional Description**

**Other Diseases**

	Septoria tritici				WSSMV	
	1998		1999		1997	1999
	Bay, AR	Whitehall, AR	Bay, AR	Whitehall, AR	Bay, AR	Bay, AR
<b>COKER 9184</b>	<b>5</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>5</b>
COKER 9663	2	4	3	2	3	5
COKER 9803	4	5	4	7	6	5
COKER 9704	4	5	4	5	6	6
COKER 9543	3	6	4	5	2	2
COKER 9835	3	6	6	6	4	5
Pioneer 2684	5	6	6	6	3	2
Jackson	4	6	4	5	6	7
Patterson	3	6	3	5	-	4
Test Mean	3	5	4	4	4	4
LSD (0.05)	1.4	1.4	1	1.5	2.2	0.9
CV %	25.1	16.3	15.9	20.9	32.6	13

Scale (1 - 9) 1 = none

WSSMV = Wheat Spindle Streak Mosaic Virus identified by Dr. Gene Milus University of Arkansas pathologist.

Table 8:  
COKER 9184

Exhibit D: Additional Description

Hessian Fly:

	Plains, GA		CPPCRU					2000			
	1999	2000*	GP	B	C	D	E	L	E	L	O
<b>COKER 9184</b>	<b>3</b>	<b>1</b>	<b>10/5</b>	<b>0/19</b>	<b>12/6</b>	<b>0/12</b>	<b>0/14</b>	<b>0/18</b>	<b>0/16</b>	<b>0/14</b>	<b>18/0</b>
COKER 9663	6	6	10/5	5/12	10/8	18/1	7/6	0/11	2/10	0/12	0/18
COKER 9803	8	9	0/12	0/13	0/18	0/16	0/16	0/16	0/11	0/14	
COKER 9704	8	6	0/18	0/12	0/16	0/10	0/14	0/15	0/15	0/12	
COKER 9543	6	9	10/1	15/1	14/1	15/1	12/1	0/12	17/0	11/3	0/18
COKER 9835	1	1	10/1	0/14	3/9	0/10	10/2	0/15	15/1	0/11	18/0
Pioneer 2684	1	1						0/17			
Jackson	8	9						0/17			
Patterson	3	1						0/17			
Test Mean	5	4									
LSD (0.05)	4.2										
CV %	45.1										

\* 1 rep

Plains, GA 1= none

CPPCRU

R/S Resistant vs Susceptible.

Screening done by USDA-ARS, Crop Production and Pest Control Research Unit, West Lafayette, IN,  
Dr. Roger Ratcliffe

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Syngenta Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  BL940812	3. VARIETY NAME  COKER 9184
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)  P.O. Box 959 Minneapolis, MN 55440 Attn: John Thorne		5. TELEPHONE (include area code)  763-593-7333	6. FAX (include area code)  763-542-0194
		7. PVPO NUMBER <b>200200135</b>	
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
10. Is the applicant the original owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, please answer the following:  a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country  b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country			
11. Additional explanation on ownership (If needed, use reverse for extra space):			

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

- If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotope, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.